

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph starting at line 25, on page 5 of the disclosure with the following amended paragraph:

The long preamble begins with a guard interval (GI) 208 that is two 0.8  $\mu$ S units long. Each long symbol (T1 and T2) 210 and 212 is 3.2  $\mu$ S in transmission duration. The received signal is typically measured in 16-bit I/Q samples every 0.05  $\mu$ S, as illustrated in step 302 of the method 300 illustrated in Fig. 3 (discussed in detail below). Thus, there are thirty-two samples that span the 1.6  $\mu$ S of GI 208. The object is to find the boundary 206 between the short and long preambles 202 and 204.

Please replace the paragraph starting at line 3, on page 6 of the disclosure with the following amended paragraph:

The preferred method embodiment of the invention uses reverse index multiplication to find the boundary between the short and long preambles. It is assumed that the packet detection algorithm already has established a “rough” timing reference, *i.e.* sample  $x(0)$  may be not necessarily be the first sample of the packet, but that the start of the packet is known to lie somewhere between  $x(0)$  and  $x(16)$  for example. Starting at sample  $x(n)$  (somewhere “close” to the boundary), the vector comprised of  $[x(n) \ x(n-1) \ \dots \ x(n-N-1)]$  is conjugate multiplied with the vector comprised of  $[x(n) \ x(n+1) \ \dots \ x(n+N-1)]$ . For all  $n$  not equal to the 32<sup>nd</sup> sample into the long-preamble, the result is noise-like. When  $n$  equal the 32<sup>nd</sup> sample of the long preamble, the product yields a large number. Due to the symmetries, the same property (and values) hold

for  $n$  offset by 64 samples. Because of this, these vectors can be coherently combined prior to taking the inner product in step 304 of Fig. 3. The vectors offset by 32 exhibit the same property (but not values) and are non-coherently combined. The magnitude squared of the result is computed and stored in a vector at step 306. The index of the maximum of the vector is the index of the start of the first long preamble symbol, as assumed in step 308, and subtracting thirty-two at step 309 yields the index of the start of the long-preamble sequence, as indicated in step 310.